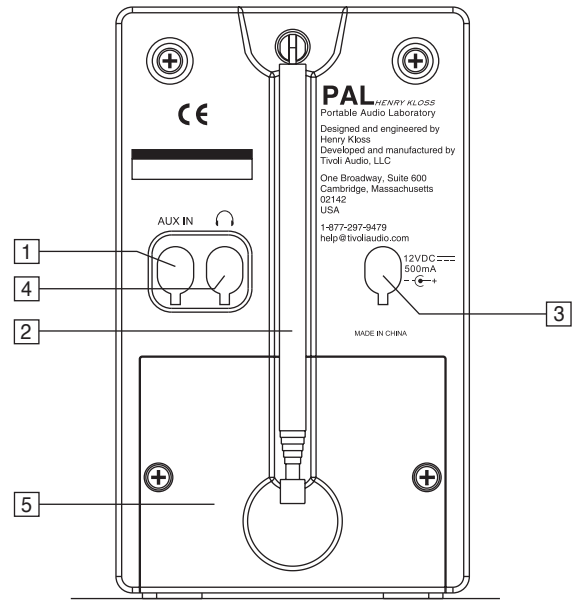


GUIDE TO FEATURES: REAR



- AUXILIARY INPUT:** This is one of the two primary sources of input for your iPod™/MP3 or other portable audio player. This input routes the audio through the iPAL's main speaker. Just connect the iPod™/MP3 device's audio output to this input. This jack accepts a 1/8" stereo male mini plug. Note that you may need to adjust the volume level differently for an auxiliary device than the level normally used for radio listening. Keep the rubber plug inserted when this input is not in use. The second input option is wireless, via any third party FM transmitter (not included) in conjunction with the iPAL's FM tuner.
- FM ANTENNA:** When listening to FM, adjust this telescoping antenna and position it for best reception. In strong FM signal locations, reducing the antenna's length may provide better reception. When the unit is not in use or when listening to AM, keep the antenna retracted to protect it. This antenna has no effect on AM reception. For AM, rotate the iPAL itself to align the internal antenna for improved reception. Buildings made with concrete, steel, or aluminum siding will hinder reception. Household appliances, electric blankets, computers, CD players, and other electronic devices can also adversely affect reception or inject noise. If you experience this, move the product further away from the offending device, or plug it into an electrical outlet not shared by another device. Metal surfaces may hinder AM reception.
- AC/DC INPUT:** Use this input to operate the iPAL using its included iPAL-PS Tivoli Audio AC power supply or an optional 12VDC nominal, 500mA fused source. Should the power supply be damaged or misplaced, use only a like replacement. The connector is a 5.5mm/2.1mm center positive connector. Keep the rubber plug inserted when this input is not in use. When unplugging the power supply from the wall outlet, do not pull on the cord.

- HEADPHONE OUTPUT:** Connect a headset to this stereo output for private listening. The head phone volume will be controlled by the iPAL's volume knob. Connecting a pair of headphones will mute the iPAL's main speaker. This jack accepts a 1/8" stereo male mini plug. You may also record from the iPAL or use it as a high quality stereo tuner by using this output. Keep the rubber plug inserted when this output is not in use.
- BATTERY COMPARTMENT:** Stores the Nickel-Metal-Hydride battery pack. Do not load any other type of batteries in the compartment. See "Replacing the battery pack."

About the battery pack:

The iPAL uses a sealed pack of 6 high capacity Nickel Metal Hydride (NiMH) cells. Unlike Nickel Cadmium (NiCd) batteries, NiMH batteries have no memory effect, provide a longer operating time, and do not use toxic metals. The front panel green LED serves both as a power indicator and battery power and charge status indicator thanks to the PAL's innovative Power Management System.

- Fast Charge Mode: With the iPAL turned Off but plugged in, from full discharge, the batteries will be completely charged within approximately 3.5 hours. During this period, the green LED will blink with a long off/short on cycle. The LED will turn off when the batteries are fully charged. Once the iPAL has been fully charged using the Fast Charge Mode, do not unplug it and then immediately plug it back in again, as this will restart the Fast Charge Mode even though the batteries are fully charged. Doing this repeatedly will damage the batteries. See also "Before You Begin".
- Trickle Charge Mode: With the iPAL On and plugged in, the batteries will be completely charged in approximately 24 hours. During this period, the LED will remain On continuously.
- Low Battery: With the iPAL turned On but not plugged in, as the batteries become discharged, the Power Management System will cause the green power indicator LED to blink with a short off/long on cycle, indicating the batteries are in need of being recharged. The blinking will grow faster as the batteries get closer to discharge until the iPAL shuts itself off to protect the batteries. The remaining playback time from the moment the blinking begins until the iPAL shuts off is estimated between 20 minutes and several hours. It is difficult to be more precise due to many factors including how long and how loud the radio is played, and the remaining charge left in the batteries. For instance, the iPAL will likely play longer off of the batteries at a low volume than at higher volume levels. As you use your iPAL, you will develop a better idea of how much playback time you have before recharging is necessary.

If the iPAL is turned on to FM or AM and the power indicator is off, then the batteries require recharging. However, it is normal for the radio to play for a brief period if turned on after the LED has gone out.

If the iPAL is to be used away from an AC or other power source for an extended period of time, it is wise to "top-off" the charge before use, especially if the LED is blinking. To do this, follow the procedure described under "Fast Charge Mode".

Note that the power indicator LED will blink with a different cycle during Fast Charge Mode while the batteries are charging. Because the iPAL's NiMH batteries have no memory, it is not necessary to wait until the batteries are exhausted before recharging, although recharging from complete discharge will also do no harm.

Leaving the iPAL plugged in, even when not in use, ensures the batteries will be charged when you need them. If the iPAL is not plugged in, the batteries will self-discharge as a safety measure. There is no harm in continuously operating the iPAL with the power supply.

**Note:** It may take up to 4 charge/discharge cycles before the batteries are operating at full capacity when new or left unused for several weeks.



Replacing the battery pack:

When it comes time to replace the battery pack, lift the FM antenna up, remove the two screws that hold the battery cover in place with a small Philips-head screwdriver. Lift the battery cover off, disconnect the lead from the battery pack and replace the batteries, making sure to correctly connect the leads. Replace the battery cover by inserting the bottom lip first, then screwing the cover back on. CAUTION: To reduce the risk of fire or personal injury, use an exact replacement MA-1 battery pack, available through Tivoli Audio or its authorized dealers, and dispose of the spent battery pack according to your state/country's regulations.

Handling the iPAL:

- The iPAL is weather resistant, but it is not weather proof. It should not be immersed in water or held under running water. It also should not be exposed to extreme temperatures.
- The iPAL is designed to be portable, but it is not indestructible. Do not drop it or subject it to strong impacts.
- Always grip the iPAL using the side indentations.
- The iPAL's weather resistant cabinet is durable, but it is not impervious to scratches.
- The iPAL's speaker is magnetically shielded, permitting use near a computer monitor or a television set.
- It is normal for the power supply to become warm during use.
- Exposing the iPAL to extended periods of direct sunlight or heat could damage the rubber coating.

Cleaning:

To clean the iPAL, use water and a soft cloth and do not rub hard. Use a mild soap only when necessary.

Headphones:

Avoid using headphones (not included) at high volume levels to prevent possible hearing damage. Do not wear headphones while operating a motor vehicle.

Warranty:

Tivoli Audio manufactures its products to very high standards and we are confident our products will perform well. Accordingly, we warranty the Portable Audio Laboratory against manufacturing defects in material and workmanship to the original owner, for a period of one year from the original date of purchase.

This warranty does not extend to damage caused by improper use/installation, faulty ancillary equipment, modifications, unauthorized repair, shipping damage or loss, abuse, accidents, use on improper voltage/current, lightning or other acts of God, normal wear and tear, commercial use, scratches to exterior surface, or purchases from unauthorized dealers. Proof of purchase as evidence the unit was purchased from an authorized dealer within the warranty period may be required for warranty service. Should service be necessary, DO NOT return the product without first contacting your dealer or Tivoli Audio. This warranty is non-transferable.

With the exception of replacing the batteries, please resist the temptation to take apart your radio. There are no user serviceable parts, and any attempt at modifying or repairing your radio will void the warranty.

Tivoli Audio will not pay for costs incurred due to correction of reception problems, elimination of externally generated noise/static, loss of time, inconvenience, loss of use of your product, or damaged caused by this product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties or the exclusion of consequential damages, therefore, these restrictions may not apply to you.

If you purchased an extended warranty from your dealer and service is required after the manufacturer's warranty has expired, you should contact your dealer to obtain service.

Please complete and return the enclosed card within 30 days of purchase to register your product for warranty coverage, or you may register on-line at: [www.tivoliaudio.com](http://www.tivoliaudio.com)

For Service outside of the USA, please contact your local distributor.

SPECIFICATIONS

|                  |  |
|------------------|--|
| <b>Model:</b>    | <b>Portable Audio Laboratory (iPAL)™</b>   |
| Type:            | Portable, weather resistant, portable audio playback system and AM/FM radio  |
| Driver:          | 1 x 2.5" treated, magnetically shielded, full range driver   |
| Power:           | 12VDC nominal - 15VDC maximum, 500mA   |
| Battery Pack:    | Model MA-1, NiMH, 7.2V, 1200mAh  |
| Battery Current: | 500mA  |
| AC Adaptor:      | Model PAL-PS:<br>UL: 120V-60Hz, 18W, 12VDC, 500mA, 6VA<br>CE: 230V-50Hz, 15W, 12VDC, 500mA, 6VA<br>3 11/16"W x 6 1/4"H x 3 7/8"D<br>2lbs |
| Dimensions:      |  |
| Weight:          |  |

All specifications subject to change without notice.

Tivoli Audio reserves the right to make product changes without notice.

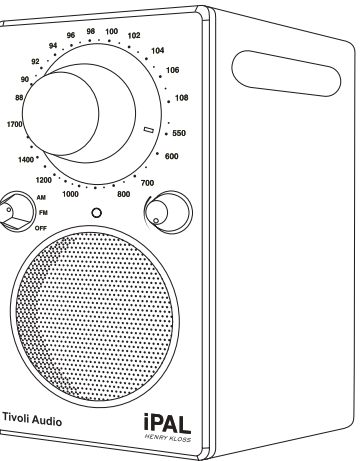
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**For more information about other exciting audio products by Tivoli Audio, please visit our website or contact us directly:**

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Cambridge, Massachusetts 02142  
Tel: 877-297-9479  
[www.tivoliaudio.com](http://www.tivoliaudio.com)

OWNER'S MANUAL

# Portable Audio Laboratory (iPAL)



# Tivoli Audio®



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



1. **TUNING DIAL:** Turn the analog dial to the right or to the left to change the FM and AM frequency range. The 5:1 tuning gear ratio provides easy, accurate tuning. The FM tuner's Automatic Frequency Control (AFC) locks on to the center of the station for lowest distortion and best reception.
2. **POWER INDICATOR:** Indicates when the unit is on as well as the charging mode and battery status. See the section marked "About the battery pack".
3. **SOURCE KNOB:** Turn the knob 1 click up to select the FM band or 2 clicks up to select the AM band.
4. **VOLUME:** Turn the volume knob up to increase the volume or down to decrease the volume of the iPAL's speaker. Since the iPAL is portable, please be considerate of others around you when increasing the volume level. This knob will also control the level of headphones (not included) when connected.